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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,398	04/19/2006	John Peter Anthony Pollard	HILLS1160	2996

28213 7590 01/30/2007  
DLA PIPER US LLP  
4365 EXECUTIVE DRIVE  
SUITE 1100  
SAN DIEGO, CA 92121-2133

EXAMINER
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KEEFE, STEPHEN L

ART UNIT	PAPER NUMBER
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3671

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/563,398

Applicant(s)

POLLARD ET AL.

Examiner

Stephen L. Keefe

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. For example, the word "ageing" on page 8, line 5 should be —aging—, the word "utilise" on page 8, line 6 should be —utilize—, and the word "tyres" on page 9, line 14 should be —tires—. The substitute specification filed must be accompanied by a statement that it contains no new matter.
2. The use of the trademarks has been noted in this application, for example in Table 1(a) on page 10 of the specification. They should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Drawings***

3. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because all of the figures have extraneous border lines on them that should be erased, and Figures 11-15 and 19-26 are illegible. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent

Art Unit: 3671

and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Tolliver et al. (US 6,217,252).

Tolliver et al. discloses a method for treating a weathered low volume asphalt surface comprising the steps of:

Providing a composition comprising a solution, emulsion or dispersion of a polymer binder material, particulate material and rheology modifiers, wherein the composition is essentially free of bituminous components and is essentially free of cement; and applying the composition to the asphalt surface (column 2, lines 24-37 and column 7, lines 49-52).

Regarding claims 2 and 3, applicant discloses in the specification that it is conventionally known in the art that the composition disclosed by Tolliver et al. can be applied to the asphalt surface using high volume, low pressure, (HVLP) equipment

Art Unit: 3671

(specification page 19, lines 31-32 and page 20, lines 17-19), and that the composition disclosed by Tolliver et al. can be applied to the asphalt surface using a mechanized squeegee or slurry machine (specification page 5, lines 7-10).

Regarding claims 4 and 15, Tolliver et al. discloses a method for treated a weathered low volume asphalt surface, wherein the solution, emulsion or dispersion of a polymeric material includes at least one polymeric material that forms a film upon setting (column 3, lines 45-49).

Regarding claims 5 and 16, Tolliver et al. discloses a method for treated a weathered low volume asphalt surface, wherein the polymeric material is an aqueous (the molten polymer gives it characteristics that are like water) dispersion of an acrylic polymer or copolymer (column 2, lines 24-28 and 44-45).

Regarding claim 6, Tolliver et al. discloses a method for treated a weathered low volume asphalt surface wherein the particulate material is at least one material selected from the group of sand, mineral aggregates, rubber particles or a mixture of two or more materials (column 2, lines 33-37).

Regarding claim 13, Tolliver et al. discloses a method for treated a weathered low volume asphalt surface wherein the application rate of the composition to the asphalt surface will result in a coating thickness between about 200 to 300 micrometers (Tolliver

et al. discloses 0.13 mm to 2 mm, which equates to 130-2000 micrometers) being applied to the asphalt surface (column 5, lines 54-58).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, 12, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolliver et al. ('252).

Regarding claims 7 and 17, Tolliver et al. discloses a method for treating a weathered low volume asphalt surface wherein the composition forms a shear thinning formulation characterized by a markedly reduced viscosity, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a reduction formulation due to the application of shear forces to provide an asphalt coating having "high wear resistance" (column 3, lines 3-4).

Regarding claims 8 and 18, Tolliver et al. discloses a method for treating a weathered low volume asphalt surface wherein the shear thinning formulation exhibits a reduction in viscosity as the formulation is applied by spraying and increases in viscosity after application (column 2, lines 39-41).

Art Unit: 3671

Regarding claim 12, Tolliver et al. discloses a method for treating a weathered low volume asphalt surface wherein the composition is applied to a depth of 130 micrometers (column 5, lines 56-57) such that it would have been obvious to one of ordinary skill in the art at the time the invention was made that any protruding aggregate in the asphalt surface would not be substantially covered by the composition in order to provide skid resistance (column 2, lines 35-37).

6. Claims 9-11 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolliver et al. ('252) in view of Winters et al. ('668).

Tolliver et al. discloses essentially all that is claimed, but does not disclose a decrease in viscosity.

However, Winters et al. teaches a method for the application of pavement wherein the composition exhibits a decrease in viscosity of at least two orders of magnitude, and it is obvious that this could occur when the composition is subjected to a shear rate increase from 1-2000 l/s (column 8, lines 6-11, 20-24). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the asphalt treatment disclosed by Tolliver et al. to have a decrease in viscosity, as taught by Winters et al., to provide for a predetermined viscosity (column 2, lines 33-36).

Regarding claims 10, 11, 20, and 21 Tolliver et al. discloses a method for treating a weathered low volume asphalt surface wherein the particulate material has a maximum

Art Unit: 3671

particle size of either less than 500 micrometers or less than 250 micrometers (column 10, lines 38-44).

What Tolliver et al. does not disclose is that the particles can be rubber.

However, Winters et al. teaches that rubber particles can be used to coat pavement (column 2, lines 32-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the asphalt treatment disclosed by Tolliver et al. to have rubber particles, as taught by Winters et al., to provide for a predetermined viscosity (column 2, lines 33-36).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sobczak et al. (US 6,413,011), Gaveske (US 5,482,737), Wilson (US 2002/0001506 A1), Ohgushi (US 4,714,507), Gaveske (US 5,576,065), Shah et al. (US 4,637,946), Smadja (US 4,256,734), and Boddie (US 4,659,748) provide additional concepts for treating a weathered asphalt surface.

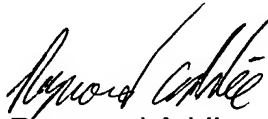
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen L. Keefe whose telephone number is 571-272-5652. The examiner can normally be reached on 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571-272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3671

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Raymond Addie  
Primary Examiner  
Group 3600

SLK  
1/26/07